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Some Stone Artifacts of the Wonkonguru of South Australia

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During the 1920's two small collections of stone tools from the Wonkonguru² aborigines of South Australia were received by the American Museum of Natural History. These collections were sent largely at the urging of N. C. Nelson, then Associate Curator of Archaeology at the Museum, in his efforts to obtain representative samples of lithic technology from different parts of the Old and New Worlds. In 1923 a collection of 21 stone tools from the Wonkonguru camp at Mungeranie, near the northeast edge of Lake Eyre, was presented to the Museum by G. Horne, and in 1927 a similar collection of six stone tools from a Wonkonguru camp near Mulka (about 25 miles south of Mungeranie) was donated by W. H. Gill, an amateur collector. Although rather limited in size, both of these collections were accompanied by ethnographic notes describing the terminology and use of these items. These notes were based on interviews with Wonkonguru natives in the two respective areas.

Increasing interest in the prehistory of Australia has encouraged archeologists to consider the possible uses for the distinctive kinds of stone tools found in different parts of Australia. Most of the descriptions offered by Horne and Gill for these two collections overlap with those furnished by Horne and Aiston (1924), but some of their observations are not

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² There are various phonetic spellings of this word. The rendering wankanuru is preferred, but for convenience the spellings used by Horne and by Gill are retained in this paper.

found in the published literature. The tools in these collections are described below, and the comments of these two observers are quoted. It is hoped that this description will add to our understanding of the range of variation within these different classes of artifacts as well as raise some issues concerning their possible uses.

TULA ADZE BLADES

This tool, termed "Tuhla" by Horne in his letter of July 7, 1923, to Nelson, is described as "Used for adze for making bommerangs (Kirra),

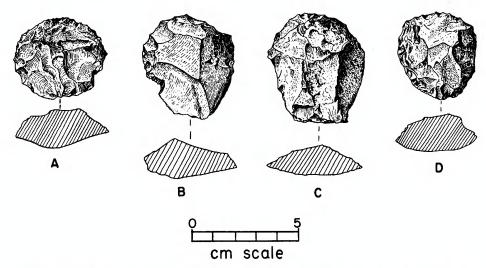


Fig. 1. Tula adze blades. A. Light gray chert, A.M.N.H. No. 85-95a (Horne). B. Light yellow chert, A.M.N.H. No. 85-95b (Horne). C. Light yellow chert, A.M.N.H. No. 85-95c (Horne). D. Light gray chert, A.M.N.H. No. 85-136 (Gill).

is mounted on *Koondi* [the wooden handle to which it was hafted]." Gill, in notes in a letter to the Museum on March 3, 1928, wrote concerning one of these tools: "Special remarks about this stone. This stone was set in the end of a heavy stick known to the Wonkonguru as a Kundi-Tuhla and it was with this adze they did most of the heavy preliminary work making their weapons, shields & utensils." The illustration (fig. 1) is of complete or relatively unworn tulas. Cooper (1954) has described how these tools became reduced in size and modified in shape as they were progressively worn down through use and reworking. Several of the slugs, worn remnants of the original tool, are present in these collections. None of the slugs retains any indications of the pattern of lateral wear characteristic of the "burren" adze slugs described by McCarthy (1949, p. 309). Horne commented concerning the adze slugs in his collection: "These

have been used and chipped with a coolkie [hammerstone] repeatedly until not fit for further using. Then the mindrie [pitch, used for hafting] is softened and the stone taken out and thrown away."

Gill, too, included one of these in his collections, stating: "Most interesting as showing the life of a Tula as chipped back to a form so thin

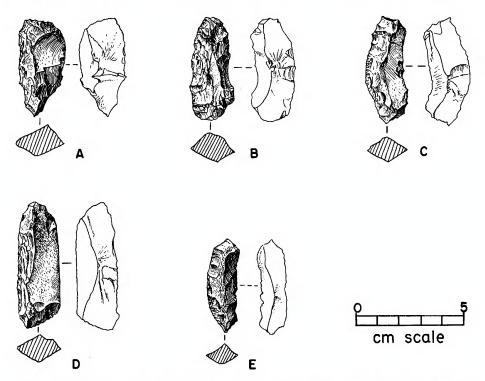


Fig. 2. Exhausted *tula* adze blades. A. Light gray chert, A.M.N.H. No. 85–96a (Horne). B. Light gray chert, A.M.N.H. No. 85–96b (Horne). C. Mottled yellow and gray chert, A.M.N.H. No. 85–96c (Horne). D. Light gray chert, A.M.N.H. No. 85–96d (Horne). E. Banded yellow and gray chert, A.M.N.H. No. 85–137 (Gill).

that it is practically unusable . . . This stone is of great interest as it shows the end of the life of the Kundi-Tuhla stone. As the native is working on wood with his Kundi-Tuhla the stone naturally gets blunt and he keeps chopping on a fresh [edge], so if the stone is a good one he will not discard it until he has chipped it right back until it becomes so narrow that it is no longer usable." (See fig. 2.) Cooper (1954, p. 97) suggested that in some instances these worn tulas were refashioned as scrapers before being finally discarded, but neither Horne nor Gill mentions such behavior among the Wonkonguru.

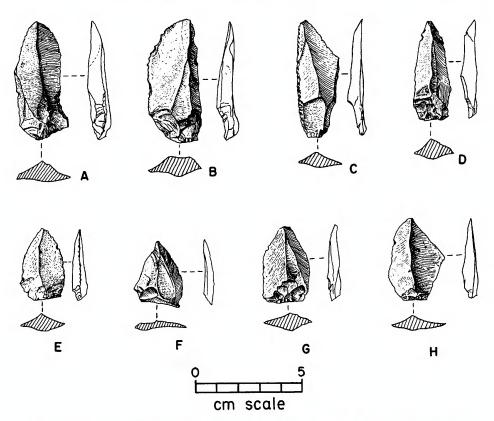


Fig. 3. Yutchawunta knives. A. Light yellow chert, A.M.N.H. No. 85–132 (Gill). B. Light gray quartz with yellow mottling, A.M.N.H. No. 85–98a (Horne). C. Light gray quartzite, A.M.N.H. No. 85–98b (Horne). D. Light gray quartzite, A.M.N.H. No. 85–98c (Horne). E. Light gray quartzite with yellow mottling, A.M.N.H. No. 85–133 (Gill). F. Light gray quartzite with yellow mottling, A.M.N.H. No. 85–99a (Horne). G. Light gray quartzite with yellow mottling, A.M.N.H. No. 85–99b (Horne). H. Light gray chert with red veins, A.M.N.H. No. 85–99c (Horne).

KNIVES (YUTCHAWUNTA)

Horne included seven specimens under the term "yuchawunta" and stated that the four long ones were "General service knives or used by boys for fighting." The three short ones, he stated, were ". . . used for circumcision, bleeding, making tribal marks." This description agrees with that of Gill, who called his single, short knife "yutchawunta," and stated, "Definitely I know this to be the circumcisional knife of the Wonkonguru Tribe." These artifacts are of special interest, since there is a suggestion here that they represent two distinct functional, and perhaps also shape, classes within the same named category of tools.

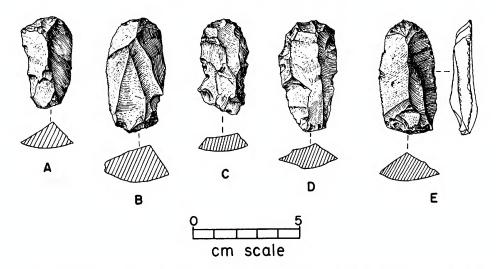


Fig. 4. Kalara scrapers. A. Tan chert, A.M.N.H. No. 85-94a (Horne). B. Tan chert, A.M.N.H. No. 85-94b (Horne). C. Tan chert, A.M.N.H. No. 85-94c (Horne). D. Tan chert, A.M.N.H. No. 85-94d (Horne). E. Dull red and yellow chert, A.M.N.H. No. 85-135 (Gill).

Elsewhere, Horne and Aiston (1924, fig. 69) have illustrated a long yutchawunta knife showing how it was held. It is worth noting that there is a chipped indentation along one edge of the knife shown in figure 3A which furnishes an excellent fingerhold if one grips this artifact in the manner illustrated. Only the three longest specimens exhibit any fine retouch; the rest, including the short surgical knives, lack retouch of any kind and show only use-wear along the edges (fig. 3).

ENDSCRAPERS (KALARA)

Horne's collection includes four scrapers made from thick flakes, with steep retouch at one blunted end. He stated that these were termed "kalara" and that they served as "Scrapers, generally used in hand and flaked for [i.e., to accommodate] fingers; sometimes mounted on koonki." Gill's collection also contains a specimen like these, and he, too, called it "Kalara" and stated that it was used as a scraper. Figure 4C is of special interest because it has a chipped indentation, presumably for a thumbhold. Figure 4D, E shows fine retouch along one lateral edge, perhaps to furnish a broad scraping surface, but lateral retouch is lacking in the other three specimens (fig. 4).

HAMMERSTONES (COOLKIE)

Horne included only a single specimen of what he termed, alternatively,

a "coolkie" or "kulki." This is a piece of smooth yellow sandstone 7.1 cm. long, 5.7 cm. wide, and 1.5 cm. thick. Definite signs of battering appear in three places along the circumference of the tool; the flat surfaces on both the top and bottom are unusually smooth, probably from use. Horne stated that this item served as a "Hammerstone, used on edge and also on flat." He included two photographs showing a man using one of these tools to percussion-flake a tula adze. Figure 5B shows how this hammerstone was held in the hand while in use.

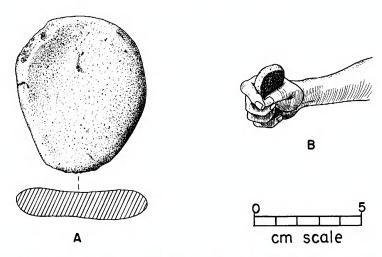


Fig. 5. A. Kulki hammerstone, A.M.N.H. No. 85-93 (Horne). B. From a photograph sent by Horne to accompany the collection.

PIRRIS

Three piris were collected by Horne; one was collected by Gill. In each case the informants recognized them as "piries," but only Horne obtained comments concerning their possible use: "Pirrie—Made by pressure [flaking]. Set on a stick (koondi) with mindrie gum, used for boring holes in churinga (inchicha) or initiation badge shells (coori toorooka)." In terms of size and symmetry of workmanship, all these specimens (fig. 6) can unhesitatingly be classed as "Eyrean" points in the manner suggested by Campbell (1960, p. 511).

There has been considerable discussion in the literature about the possible use of the *pirri*. Mulvaney (1961, p. 78) wrote as follows concerning *pirris* recovered from excavated levels at Devon Downs and Fromm's Landing: "These archaeological specimens show no signs of wear on the points, and Horne and Aiston's assumption that they were engraving or drilling devices must be rejected. Aiston apparently collected

hafted pirris amongst the living Wonkonguru natives, which were employed as engravers, but such specimens are best explained as re-utilized prehistoric artifacts." As Mulvaney later pointed out, there is no evidence that the Wonkonguru were manufacturing these tools, although they were of course using them, at the time they were studied by Horne and Aiston.

It has been suggested by others, notably Hale and Tindale (1930, p. 205), that these artifacts may have served as spearpoints. Later, Tindale

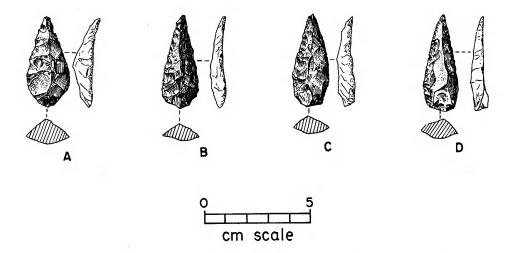


Fig. 6. Pirris from Mulka and Mungeranie. A. Light yellow chert, A.M.N.H. No. 85-97a (Horne). B. Tan chert, A.M.N.H. No. 85-97b (Horne). C. Light gray chert, A.M.N.H. No. 85-97c (Horne). D. Tan chert with yellow streaks, A.M.N.H. No. 85-134 (Gill).

(1957, p. 17) proposed that the bifacially trimmed spearpoints of the Kimberly region were the direct descendants of the unifacially worked pirri. However, an examination of the four pirris collected by Horne and Gill suggests strongly that they were not used as spearpoints. The largest of these points is 4.5 cm. long and 1.7 cm. wide—too small, in all likelihood, to have served as a spearpoint. More important than size, however, is the fact that all four specimens retain the pronounced curvature of the original flake from which the artifact was fashioned. This curvature would not improve the efficiency of these implements as spearpoints. With regard to these four specimens, then, I must echo the observations of Campbell (1960, p. 522), "... the Kimberly point has the appearance of being a spearhead of marked potential for penetration and wounding for which purposes the pirri would be almost completely ineffective, both in size and form."

In the manner of its execution, the pirri contrasts sharply with the remainder of the Wonkonguru assemblage. The tula adzes, kalara scrapers, and yutchawunta knives are all well enough made to have performed their respective functions adequately, but they show little effort at symmetry, and trimming is minimal. The pirris, in contrast, are, without exception, symmetrical and well finished by means of even and extensive trimming (much of it probably by pressure flaking). At both Devon Downs and Fromm's Landing pirri points were found in stratigraphic associations at early levels with geometric microliths. These microliths characteristically show steep retouch along at least one edge. The descriptions by Horne

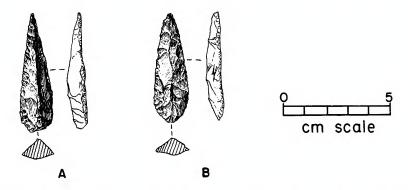


Fig. 7. Pirris from site near Adelaide. A. Light gray chert, A.M.N.H. No. 85-148a (Wissler). B. Light gray chert, A.M.N.H. No. 85-148b (Wissler).

and Aiston (1924, p. 98) indicate that the Wonkonguru made occasional use of such microliths, but did not manufacture them and ". . . either called them chips or said they were too small to be any good." Mulvaney is probably correct in his view that the *pirris* used by the Wonkonguru were actually much older artifacts being re-used, and the same seems to be true for the geometric microliths found at Mungeranie.

Another possible interpretation, however, is that pirris were used, as Horne suggested, in the context of sacred objects like churingas. Were this true, the pirris themselves might have been regarded as sacred and were, therefore, treated specially. The symmetry of shape and the evenness of the retouch are ample evidence of at least a degree of special treatment. It may be that we can see a possible functional as well as historical explanation for the presence of these distinctive flint objects. After all, the Wonkonguru still desired and sought these items even when they were no longer able to make them themselves. Admittedly, this line of interpretation is speculative and by no means settles the issue of the possible uses of the pirri, but I would caution against explaining away the early

interpretations offered by Horne and by Aiston. These may be of great value, provided one accepts them critically and recognizes their limitations.

Only one of the pirris (fig. 6A) collected by Horne and Gill shows slight indication of use-wear around its tip. But two pirris collected by Clark Wissler from a surface site near Adelaide in 1927 show marked wear near the tip, suggesting use as drills. At the present time the American Museum of Natural History has 19 pirris in its collections; only four of these show any definite signs of use-wear. In these four specimens, the wear occurs near the tip rather than along the base. The two pirris collected by Wissler may not be particularly old, but they do show that at some time these items were used as drills or engravers (fig. 7).

REFERENCES CITED

CAMPBELL, T. D.

1960. The pirri—an interesting Australian aboriginal implement. Rec. South Australian Mus., vol. 13, no. 4, pp. 509-524.

COOPER, H. M.

1954. Material culture of Australian aboriginals. Part I. Progressive modification of a stone artifact. Rec. South Australian Mus., vol. 11, no. 2, pp. 91-97.

HALE, H. M., AND N. B. TINDALE

1930. Notes on some human remains in the Lower Murray Valley, South Australia. Rec. South Australian Mus., vol. 4, no. 2, pp. 143-218.

HORNE, G., AND G. AISTON

1924. Savage life in central Australia. London.

McCarthy, F. D.

1949. The prehistoric cultures of Australia. Oceania, vol. 19, no. 4, pp. 305-319.

MULVANEY, D. J.

1961. The stone age of Australia. Proc. Prehist. Soc., Cambridge, England, new ser., vol. 27, pp. 56-107.

TINDALE, N. B.

1957. Culture succession in south-eastern Australia from late Pleistocene to present. Rec. South Australian Mus., vol. 13, no. 1, pp. 1-49.